

A Plea for Earthly Sciences

Bruno Latour, keynote lecture for the annual meeting of the British Sociological Association, East London, April 2007.

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Ladies and gentlemen.

The mood of this talk is entirely James Lovelock's fault. In his latest book, *The Revenge of Gaia*, Lovelock —apparently a kind, decent, serious, wholly pacific scientist—, transports his readers into the midst of a front line of terrifying intensity.¹ And yet, he is not talking about one of those antiquated wars that so many humans wage against one another, but of another war, the one that humans, *as a whole*, wage, without any explicit declaration, against *Gaia*.

As you all know, I am sure, “Gaia” is the mythical name that Lovelock has given to the life support systems of our planet. In spite of the goddess's name, Lovelock knows fully well that “she” is not a person, not even an organism, but the emergent property of all the feedback mechanisms that, on the whole, have balanced themselves well enough over the last billion years to maintain life on Earth inside some fluctuating albeit restricted limits. What he shows, chapter after chapter in his book, is that those limits have been trespassed by our own human collective action to such a point that all the feedback mechanisms are now oriented in the same direction: there are no longer any negative mechanisms able to balance the self-reinforcing positive ones.

This is why he derides the timid ecologist who promotes “sustainable development” as a solution. Lovelock mocks the ecologist's naiveté and uses an alternative metaphor that is especially telling to all of the British: the human race is in such a state of urgency that it is like a defeated army stranded on the beaches of Dunkirk! “Hasty retreat” is the name Lovelock gives to what will have to happen on the front line if we were ever to be held up in a June 1940 of truly global proportion. Speak of a *World War*... Those of the 20th century were little provincial conflicts compared to the one that awaits us. Retreat, retreat! before it's too late and we lose everything.

We will lose especially because this war against Gaia has one trait in common with that rather local fight ridiculously called the “War on Terror”: it cannot be won. Either we come out on top of Gaia, and we disappear with her; or we *lose* against Gaia, and she manages to shudder us out of existence. Now that's “terror” for real, and I am not greatly

¹ Lovelock, James. *The Revenge of Gaia: Earth's Climate Crisis and the Fate of Humanity*. Basic Books, New York, 2006.

reassured when Lovelock punctuates his pedestrian and yet hair-raising prose from time to time, with a few half-hearted “I hope I am wrong”... Well I hope so too..

The reason why I have been so unsettled by Lovelock’s book is not because it has been continuously reinforced and documented by every new meeting of the various international Committees on Global Warming, but rather because there is a utterly mysterious hole in the book that Lovelock, this kindly gentleman, does not even bother to point out: in 2050, he says (and that’s tomorrow, really), civilization will have disappeared (not, mind you, the human race, there will be scattered people in Kamtchatka and Terra de Fuego, although, by the way, not much of British Isles will be left...). Disappeared, that is, if Gaia does not succeed in obtaining a cool planet from us with only five hundred million humans. Yes, you heard me, that’s what he says: “500 millions”, and by then, if projections are right, we should be well over 9 billion. Now, that’s quite a retreat to ask for and in less than 50 years! Nowhere in the book, however, does Lovelock bother to explain how we could possibly manage to move from one figure to the other. Nowhere does he mention that the crimes of the 21st century might have to be at least one order of magnitude *greater* than those of the 20th century... He quietly, and almost absent-mindedly *implies* it. That’s what I found so terrifying. How can we protect our collective existence either against a War on Gaia that we have no way of winning, or against committing crimes over fellow humans of such mind-boggling magnitude?

Don’t worry: I have no intention of adding another gloomy prognosis to those we read everyday in the newspapers. I am not going to play the prophet of doom by telling you the precise moment when this very place in the East part of London Docklands will be put under deep water... The reason why I start with Lovelock’s call for a new Retreat of Dunkirk, is that I think the ecological crisis entirely transforms the question that has been raised for this annual meeting. I quote: “social connections: identities, technologies and relationships”.

Even if you don’t share the gloomy prognosis of Jared Diamond, Lovelock and so many other authors, you might agree that embarking on a “world war” makes an enormous difference to what counts as “social connections”.

How can we read in the newspapers that “we” as humans might be responsible for 30 or 40% of species extinction, without this effecting a change in our “identity” and our “relationships”? How can we remain unmoved by the idea that we are now as dangerous to our life support system as the impact of a major meteorite? How can we have the same definition of ourselves, now that all the terms which earlier were metaphorical (terms like “upheavals”, “tectonic shift”, and “revolutions”) have become *literal*: yes indeed, collectively we are just as powerful as what caused three or four other mass extinctions — and some scientists use the word Anthropocene to describe this new geological era. Do you feel proud of that? Some might, actually: so big, so mighty! But how can this feeling be reconciled with the opposite one: we are so little, so powerless, a mere scratch on the surface of the Earth? How could we be capable of war crimes of such proportion and yet so absolutely despondent? “I did nothing, I followed the orders”. Is this discrepancy – between the immensely big and powerful, and the immensely weak and puny – not one of the reasons why we keep reading all of this literature on ecological crisis without really *believing* in it?

To begin to address the theme proposed by the organizers of this annual meeting, it seems to me that we have to redefine the collective “we” that is the new focus of the social sciences (I will redefine the word “social” in a minute).

The great German thinker, Peter Sloterdijk, has proposed that history was never about “modernization” or about “revolution”, but was rather about another

phenomenon, that he names “explicitation”.² As we moved on, through our technologies, through our scientific inquiries, through the extension of our global empires, we rendered more and more *explicit* the fragility of the life support systems that make our “spheres of existence” possible (“sphere” is the theme of Sloterdijk’s three volume *magnum opus* unfortunately not yet translated into English).

Everything that earlier was merely “given” becomes “explicit”. Air, water, land, all of those were present before in the background: now they are explicitated because we slowly come to realize that *they* might disappear —and *we* with them. In another war metaphor taken this time, not from the Beach of Dunkirk but from the terrifying day in 1917 in the trenches of Ypres, Sloterdijk sees the symbol of the times: suddenly, as the greenish cloud of toxic gas migrated from the German side, British soldiers began to suffocate and die. Air, the air we always took for granted even through the horrors of the trenches, was suddenly *lacking*, air was thus explicitated in the most terrifying way. It could no longer be taken for granted, it entered the spheres of existence as one of their “air conditions” (another of Sloterdijk’s obsessions). From the implicit, it became explicit.

“What has this to do”, you could object, “with the topic of the social sciences? No matter how you define what humans do, sociologists can still study their shifting ‘identities’, their moving ‘technologies’, their newly formed ‘relationships’. ‘Social connections’ will always be ‘social connections’.”

Not necessarily, and this is where I want to enter more deeply —and may be too polemically— into the topic: the whole idea of “social connections” was linked to a moment in history, that of *modernization* and of *emancipation*. What happens if we have shifted to another period, one of *explicitation* and of *attachments*?

Since “we have never been modern”, we have always been living through a completely different history than the one we kept telling ourselves about: until the ecological crisis began to strike hard and tough, we could go on as though “we” humans were living through one modernization after another, jumping from one emancipation to the next. After all, the future was one of greater and greater detachment from all sorts of contingencies and cumbersome ties. Free at last!

What happens to our identities, if it finally dawns on us that that very same history always had another meaning: the slow explicitation of all of the attachments necessary for the sustenance of our fragile spheres of existence? What happens if the very definition of the *future* has changed? If we now move from the taken into account of a few beings, to the weaving of careful attachments with an ever greater and greater list of explicitated beings? Attached at last! Dependent! Responsible!

Is it at all imaginable that the “social sciences” could have the same agenda, the same methods, the same calling, in both cases?

If modernization was for humans, explicitation is for... for whom? what would be a good name? “Post-human” will not do, but why not using that word that science-fiction writers have used all along, yes that of *Earthlings*? After all, if Lovelock is even one bit right, it’s fitting to call those who have waged wars on Gaia, Earthlings.

What I am saying, to put it too bluntly, is that while we might have had social sciences for modernizing and emancipating *humans*, we have not the faintest idea of what sort of social science is needed for *Earthlings* buried in the task of explicitating their newly discovered attachments. If modernization has been a parenthesis, for what happens next we are being sent back to the design table. I surmise that’s why we have been assembled here today.

² Sloterdijk, Peter. *Sphären Iii- Schäume*. Suhrkamp, Frankfurt, 2004.

But how can we equip the social sciences for this radical new task? You will not be surprised, if I claim that one of the problems lies with the notion of “social connections” that lies in the very title of our gathering. If it is true that a word gets its meaning by opposition to other words, what is the opposite of “social” in that expression? I am not completely sure that we will agree on the definition, but likely candidates must be something like “non-social”, “natural”, “material”, “economic”, maybe “biological” or “psychological”. In most of the social sciences, as they have been developed during the modernist parenthesis, the word “social” was put in charge of gathering whatever was not already firmly fixed and cultivated by the other higher, older, harder disciplines. To speak of “social connections” is thus inevitably followed by the sequel: “social” “*by opposition*” or “*by contrast*” to other types of connections. “Not only” legal, but also “social”; “not only” psychological” but also “social”; and so on.

Naturally, this division among connections was not a problem when we were busy modernizing our societies —or rather while we *believed* ourselves to be doing so— but it becomes a major hindrance once we try to shift our efforts toward the explicitation of the many attachments that we have to weave together simultaneously. A hindrance for one good reason: while “social” was useful for focusing on *one* type of area *among* several others left in the hands of other specialized domains, the social is completely useless for tracing what should now be *common* to the other types of domains. In other words, “social” might throw light on the “social”, but that’s all, when what we now need is a type of connection that sheds light on all of the other types of connections as well.

This is why, many years ago, I proposed that we shift the definition of sociology from the study of “social” connections to the study of “associations” —keeping the same Latin etymology but refusing to limit the inquiries to one domain only, as if, side by side, we had “social”, “psychological”, “legal”, “biological” and “economic” connections, each with its own science and protocols.

There are clearly two meanings (at least) of the word “social”: the first, social n°1, that is taken to be a domain among others non-social ones; the second, social n°2, that establishes connections, associations, collections, whatever the name, between all sort of heterogeneous domains, none of them being “social” in the first meaning of the word. To sum up the contribution of “actor-network-theory”: social is not the name of any one link in a chain, nor even that of the chain, but it is that of the *chaining* itself. A laboratory discovery, a piece of technology, a work of art, indeed a living being such as Michel Callon’s famous scallops, are not social in the first meaning of the word, but they are social in the second one, whenever they deeply modify (or translate) what they are tied to.

If I now consider reconsider the theme of this meeting, you will agree that it takes two entirely different directions depending on how we understand “social connections”. If it’s social number one, we should concentrate on the social domain and leave the others to specialists; if it’s social number two, our paramount duty is to understand how these domains might reconnect.

I need no other proof to show that this is not a new debate other than the fierce dispute that Durkheim had with his predecessor Gabriel Tarde, more than a century ago. As it is becoming now well known, Tarde was constantly complaining that Durkheim kept messing up causes and consequences. While the collective —my word— was made up of legal, religious, technical, scientific connections, Durkheim, Tarde complained, kept trying to “explain” all of those connections by the fact that they were in essence social — that is, social n°1.

Religious ties where not due to religion, in spite of its venerable etymology, but to the diffracted presence of Society above the praying souls. Legal ties where not due to law itself, but again to the underlying weight that Society gave to the relationships. And the

same was true, for Durkheim, according to Tarde, for every other activity —economic, spiritual, artistic, political or psychological. The social realm was what gave solidity, durability and consistency to domains like religion, law, economy, psychology that could not hold by themselves —nature being of course the only exception.

For Tarde, on the other hand, such reasoning was just a complete fallacy: society is nothing but the empty word we use for the superposition of all of the heterogeneous connections produced by *non-social* elements like law, biology, economy, politics, physics etc. Social (n°1) explains nothing, not even itself; on the contrary: it has to be explained. The duty of sociologists is not to limit themselves to the social connections or, even more absurdly, to explain away the other domains by pretending that, in essence, they are made of social ties, but to follow through which associations so many non-social ties are brought together to form a durable —and maybe livable— whole.

Naturally, this dispute between Tarde and Durkheim was entirely buried (actually no one mentioned it before a few of us resurrected it a few years ago...), buried, that is, until the development of science studies gave it a completely new import.

As it has been by now well exemplified, the “social” n°1, during the modernizing period, was nothing more than the second half of a division, the other half being, of course, the “natural”. If sociologists had been so complacent about the meaning of “social” in the expression “social connections”, it’s because (as science students began to realize), they had quite consciously delegated to the harder sciences the task of dealing with the really really hard causal connections: the ones that obtained between non-humans. Science and technology on the one hand, social connections on the other. But when science studies began to try to provide a “social explanation” of science and technology, that is of causal relations, the whole divide went awry. This is what I call, using my Christian upbringing (and in the true spirit of Easter!), the *Felix culpa* of science studies: by failing to give a social explanation of science and technology, we got rid of social connections altogether...

But even this good riddance would have remained a curiosity inside of our tiny sub-discipline of STS, without the ecological crisis: suddenly, at a gigantic scale and speed, every single element of the former “nature” or the former “society” began to crumble down. Such is the amazing transformation to which we have had the good fortune of bearing witness. Every one, it seems, has become a practitioner of science studies!

While thirty years ago, it took sociologists and historians of science and technology enormous efforts to associate a given matter of fact to the human groups responsible for its coming into existence, it seems nowadays that there is hardly a matter of fact left without its associated constituency. Have you noticed it? every disease now has its patient organization, every river its advocacy group, every Swiss glacier, it seems, its protective cover, every bird, every tree, its own group of volunteers and militants —it is as if every bug had its blog! When last year astronomers turned lexicographers modified the list of planets in good standing, that too made the headlines —and some planetoids had their vociferous defenders! I have learned recently that even nettle, this real nuisance of my garden, benefits from a group caring for it and trying to redress what they see as sheer plant discrimination! Nettle?!

To qualify such a sea change, this fast disappearance of “nature” & “society”, I have proposed to say that all *matters of fact* have become *matters of concern* —or, more philosophically, that *objects* have become *things* that is, issues, gatherings, assemblies of some sort. Whatever the name, one consequence is sure: this is the new turf of the newly redefined social sciences. The ecological crisis has forced us to abandon the nature and society collectors, reinforcing to a degree none of us thought imaginable, I swear, the feeble insights of early science studies.

Now this is the hard part: the demise of the “society”/”nature” divide, what I had called the Modernist Constitution, is only, so to speak, a *negative* event: we are finally freed from a narrative that never accurately described what happened during the global expansion of humans anyway. The “society”/”nature” divide says nothing at all about what really happened. We are still struggling to find a *positive* narrative, one fitting for the newly redefined Earthlings. To be sure, we now know that social (n°2) is the name of the whole chaining and not of any of its link, but that’s not a great advance. The collective (my word for the former “society” slash “nature”) still has to be assembled.

If the world is not made of either nature or society or any combination thereof, what is it made of?

Back to Tarde, or rather to ANT: take for instance the law (Tarde by the way was been a judge most of his career). Forget about explaining the solidity of legal ties by appealing to some extraneous force, for instance society itself. Follow in details, for instance in a court of law, as I have done with the French *Conseil d’Etat*, or as Mike Lynch and his colleagues has done with DNA fingerprinting, the sort of objectivity it provides between scattered elements: common sense reasoning, results from instruments, precedents, legal documents, signatures, etc.³ If you do this, you might end up focusing on a type of *connector* that is not social (social n°1) to be sure, but that does connect in a thoroughly original way. Whenever we sign our name at the bottom of a document, we link words and deeds through a type of attachment that is typical of legal connection. Whenever a lawyer tries out possible gaps in the “chain of custody” that guarantees, through many layers of paper works, that a DNA sample pertains indeed to this or that suspect, we witness a sort of objectivity that deserves to be treated with extreme care, and not explained (that is, explained away) by saying that, if its strong and durable, it means that social forces have taken over. No, it’s just the opposite: a large part of what we mean by being “socially durable” is to be tied by that sort of fragile and yet wholly original legal ties: I am responsible for what I have done, precedents carry some weight, the law binds. It does not bind socially, it binds legally.

The same is true, as is well known now through the efforts of the STS community, if, instead of to law, we were paying attention to techniques. Techniques don’t form a cold domain of material relations wholly divorced from the rest of the collective. It does not form an infrastructure under our feet nor is it a mere background for the exercise of our freedom. If you take the example of the container so beautifully studied by Marc Levinson, it becomes very quickly clear that a large part of what we mean by “global” depends on the invention of that box.⁴ To use the title of this book, the container is “the box that made the world smaller and the world economy bigger”. But nowhere in the book do you have a technique on the one hand, and a society on the other. And for one good reason: the container is entirely a logistical invention with a very few “harder” parts—like the cranes or the holding gears. The spread of the container depends just as much on legal litigation, accounting procedures, ship design, labor relations among dock workers unions, harbor redevelopment, and so on. In other words, whenever a technology is considered, it becomes an assemblage of complex heterogeneous threads. And yet, there is a type of connection that can truly be called technical: that is when non-humans are brought in, aligned and black-boxed in such a way that they provide some sort of durable objectivity. This is why it’s so moot to try to provide a social explanation (still social n°1)

³ Lynch, Michael, Simon A. Cole, Ruth McNally, and Kathleen Jordan. *Truth Machine: The Contentious History of DNA Fingerprinting*. The University of Chicago Press, Chicago, 2008.

⁴ Levinson, Marc. *The Box. How the Shipping Container Made the World Smaller and the World Economy Bigger*. Princeton University Press, Princeton, 2006.

of the spread of a technique, since a large part of what is meant by being durably associated is made, in the first place, by the weaving of those very technical ties.

And I could have multiplied the examples, by taking, for instance, science or religion, or art, or politics. Each of those words designate specific modes of connection that cannot be explained by the other. If you had the patience to listen to the last two cases, law and technique, you will have noticed that I ended up each case with the same lesson: the durability of the associations is due to the ways laws and techniques connect. It's not because they are social that they last, but because the collective relies in part on the legal and technical ways to form a durable sphere. In a way, this is not surprising since (at least according to ANT) society, or rather the collective, is the consequence of all the different types of association —and not its cause.

All the same, it's a great weakness for a theory to claim that every mode of connection is specific, while at the same time not being able to say in *what way* each mode differs from the others. This is the problem I have always had with actor-network-theory, or indeed with good old Tarde: they offer extremely efficient ways to get rid of the social (social n°1), but of every single association they simply say that they associate... Even if it is nice to study at last the whole chain and not only one of its rings or links, it's disappointing not to be able to say anything about the composition of that chain. This is why I often compare ANT to a withdrawal cure: it's very good to clean your blood stream from centuries of addiction to social explanation, but it does not sustain you; it's a negative, not a substantive argument. You are cleaned from the bad dope of the social to be sure, but you are not yet healthily fed...

This is why in the few minutes left, I want to try to push the argument further: the social sciences have a true object which is not the social *per se* (social n°1), but the shifting attachments offered by various non-social modes of connections.

If this sounds obscure, consider the collective as a sort of game of building *Legos*, but whereas Lego bricks have only one type of connection (the four peg standard), imagine that there are several types of connectors. The bricks have many shapes and they are all of many bright colors, but what attaches them can differ. Now, suppose we call one of those attachments, the legal one, another the technical one, still another the religious one, yet another the scientific one, the political and so on. Then, begin to build the collective out of those heterogeneous bricks using several of those various bonds —to use also a chemical metaphor. When bricks are connected through legal ties, they spread in a fashion that is highly specific and that possesses its own solidity, even though the bricks come from all over the place. Same thing, when it's the mode of connection of religion or politics or science that is used to relate heterogeneous building blocks.

The point of this somewhat clumsy metaphor is not to draw various spheres of activity, as Luhmann has tried to do, each of them with its own homogeneity, one being the legal sphere, the other the scientific sphere, a third one the technical sphere, and so on. Institutions are much too heterogeneous to be assembled in a Luhmannian way, side by side. And yet, there is something deeply right in Luhmann's attempt to save the social from social explanation: it's totally impossible to assemble a collective made only of social (social n°1) ties. This does not mean that it's a system made of sub-systems —there are no systems and no sub-systems—, but it does mean that modes of connection are indeed different and that it's utterly moot to account for the legal by using the technical, or the religious by the scientific, or the artistic by the economic, etc. Each modes of connection has its own way of spreading, its own epidemiology, if you wish, its own contagion, its own objectivity, its own solidity.

What I am really saying is that, whereas there is no independent domain of science, technique, law, religion, etc, it makes a huge, a lasting, an enormous difference whether a

connection is made *legally*, *scientifically*, *religiously*, *artistically*, *politically* or *technically*. It's the *adverb* that designates a really major ontological nuance even though there is no such a thing as a substantive definition to be given: politics is not a domain, it's a type of relation. The whole attention should shift to the modes of connections, or "modes of existence". In that sense, the early intuition of ANT was right: it's just that actor-network-theory is a black and white rendering of associations (social n°2), when what is needed is a fully *colorized* version.

The argument is not as far fetched as it may seem, because it's exactly the one proposed, (like those of Tarde at the beginning of the former century), by William James under the label of *radical empiricism*.⁵ By reminding you of his argument, I will bring this lecture to a close and reconnect with the ecological crisis I started from.

What I want to say is that the problem with the social sciences is that they are not empirical enough, just at the time in history when they are most needed to redesign the whole spheres of existence from top to bottom. Or rather, they have inherited a very narrow definition of empiricism, what I call *first empiricism*. What's the difference with the second empiricism, the one that James called "radical"? Precisely: relations, or connections, that is precisely those modes of connections, or modes of existence that are *not* depending on the divide, on the bifurcation, between, natural and social.

I am saying this with some trepidation, because I know that empiricism was invented in this country, in England and Scotland, a few centuries ago and that it's impossible to convince a Brit that it was a *historical* invention and not the true bedrock expression of what the world is "really like": middle sized dry goods on the one hand, on top of which you might wish to throw some symbols or social connections. In the eyes of the Brits, you have to be a French to deny that this not the real state of affairs. And yet, I will rub it in: first empiricism has been limiting experience to an amazingly poor repertoire of connections: the world provided sensory inputs and all of the relations had to come from the human mind. I quote James:

"I will say nothing here of the persistent ambiguity of relations. They are undeniable parts of pure experience; yet, while common sense and what I call radical empiricism stand for their being objective, both rationalism and the usual empiricism claim that they are exclusively the 'work of the mind' - the finite mind or the absolute mind, as the case may be". (Essays in Radical Empiricism, p.148-149)

The social sciences to be sure have managed since the 17th century to socialize somewhat the "work of the mind" so that it is now cultures, societies, norms, and no longer individual heads that are in charge of molding sensory data into shapes. And yet, just as in the time of Locke or of Hume, social scientists never managed to realize again that *relations too are given into experience*. For reasons that are due to the Modernist settlement, the social sciences, as a rule, accepted to limit experience to the incredibly narrow confines of objects without relations. What a pity. As James so nicely said:

"Prepositions, copulas, and conjunctions, 'is', 'isn't', 'then', 'before', 'in', 'on', 'beside', 'between', 'next', 'like', 'unlike', 'as', 'but', flower out of the stream of pure experience, the stream of concretes or the sensational stream, as naturally as nouns and adjectives do, and they melt into it as fluidly when apply them to a new portion of the stream". (idem p 95)

What James is saying in effect is that if it might be about time to be empirical at last, that is to *add nothing* to experience, to be sure, but not to *withdraw* anything from experience either, especially not connections! Conjunctions! Prepositions! The very stuff out of which experience is woven! Unfortunately, first empiricism, has done just that,

⁵ James, William. *Essays in Radical Empiricism*. University of Nebraska Press, London, 1996 [1907].

depriving first, modernist philosophy, and then later the modernizing social sciences, of any chance of being faithful to what is given in experience.

I will close this lecture with a strange paradox: never was the need for radical social sciences more pressing than it is today, and yet this is just the time when the lines of columnists in the Western world, especially in France, are complaining about the abandonment of “utopian ideals”, the demise of “revolutionary impulses”, the fall back into complacency, the final victory of neo-liberalism; this is just the time when the task that lies ahead is not only “revolutionary” but of truly “earth-shaking proportion” —and remember, all of those expressions are now literal not metaphorical. We have managed to shake the Earth out of balance for good!

Think of it: what was the storming of the Winter Palace, compared to the total transformation of our landscape, cities, factories, transportation system for which we will have to gird ourselves after the Oil Peak? How ridiculously timid does Karl Marx’s preoccupation with the mere “*appropriation* of means of production” seem, when compared against the total metamorphosis of the entire *means* of production necessary to soon adjust nine Billion people on a livable planet Earth? Every product, every biological species, every packaging, every consumer in excruciating detail is concerned in this, together with every river, every glaciers, and every bug —even the earthworms have to be brought in according to a recent article in the *New Scientist!* We knew about Darwin’s work on earthworms, but where could you find, before today, a Marxist view of earthworms? I know Marx’s salutation: “Well done, old mole”, yes, but, as far as I know, he never said “Be careful with earthworms!”.

It’s now painfully clear that communism was never more than capitalism’s abundance pushed to the limit. How unimaginative was such an idea, compared to the modification of all the sinews and corridors of what abundance and wealth should be, from now on! Which communist could think that the day would come when they would have to devise a politics for the Gulf Stream? The Gulf Stream, for Goodness sake! And yet it might fail you (and then this place in London will be under water and probably frozen too!). Yet this is just the time when activists and politicians, pundits and intellectuals, continue to complain about the “ends of utopias” and the disappearance of “*les mâtres penseurs*”...

No wonder, the travails of explicitation have nothing in common with the naïve dreams of emancipation. But they are radical nonetheless, they are our future nonetheless. Don’t fool yourselves: explicitation is a much tougher task than the “business as usual” of the modernizing revolutionaries. There are more Third Ways than even New Labor and Tony Giddens could ever envisage...

Who are you really, Earthlings, to believe that you are the ones adding relations by the sheer symbolic order of your mind, by the projective power of your brain, by the sheer intensity of your social schemes, to a world entirely devoid of meaning, of relations, of connections?! Where have you lived until now? Oh I know, you have lived into this strange modernist utterly archaic globe; and suddenly under crisis you realize that all along you have been inhabiting the Earth. It’s as if you had changed space and time, past, present and future. Can we reequip our disciplines so that they meet the challenge? If Lovelock is right, to try to prove it we have a tiny window of opportunity, less than forty three years to go... So now let’s get on with the social, I mean the *earthly* sciences.

Thank you.
